

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A loudspeaker comprising:  
  
a sound generating element mounted on a support structure;  
  
two rotary actuators mounted at opposing edges of the sound generating element and operable to drive motion of the sound generating element relative to the support structure by rotating said edges.
  
2. (Original) A loudspeaker according to claim 1, wherein the two rotary actuators are operable to drive motion including components of rotation in opposite senses if driven with a common drive signal.
  
3. (Currently Amended) A loudspeaker according to claim 1 ~~or 2~~, wherein the two rotary actuators are identical.
  
4. (Currently Amended) A loudspeaker according to ~~any one of the preceding claims~~ claim 1, wherein the rotary actuators are piezoelectric actuators.
  
5. (Original) A loudspeaker according to claim 4, wherein the rotary actuators have a bender construction.

6. (Currently Amended) A loudspeaker according to claim 4 ~~or 5~~, wherein the rotary actuators each extend in a curve between the sound generating element and the support structure.

7. (Original) A loudspeaker according to claim 6, wherein the curve is an arc of a circle.

8. (Currently Amended) A loudspeaker according to ~~any one of claims~~claim 4 to 7, wherein each rotary actuator is longer in extent along the axis about which said rotation occurs on operation than in extent between the ends of the actuator which rotate on operation.

9. (Currently Amended) A loudspeaker according to ~~any one of claims~~claim 4 to 8, wherein the rotary actuators are each coupled at one end to the sound generating element and at the other end to the support structure.

10. (Currently Amended) A loudspeaker according to ~~any one of the preceding claims~~claim 1, further comprising a drive circuit for supplying a common drive signal to each actuator.

11. (Currently Amended) A loudspeaker according to ~~any one of claims~~claim 1 to 9, further comprising a drive circuit for supplying a separate drive signal to each actuator.

12. (Original) A loudspeaker according to claim 11, wherein the drive circuit includes a low frequency mixer circuit arranged to mix a low frequency component of each of the separate drive signals into the other of the separate drive signals.

13. (Original) A loudspeaker according to claim 12, wherein the low frequency mixer circuit comprises :

two signal paths each for supplying one of the separate drive signals to a respective actuator;

a filter arrangement arranged in each signal path to filter out said low frequency components of the two separate drive signals;

a signal processing circuit arranged to combine the low frequency components of the two separate drive signals filtered out by the filter arrangement and to re-introduce the combined low frequency components into each of the signal paths.

14. (Currently Amended) A loudspeaker according to claim 12 ~~or 13~~, wherein the low frequency component is a component in a frequency band below a predetermined cut-off frequency.

15. (Original) A loudspeaker according to claim 14, wherein the predetermined cut-off frequency is 400Hz or less.

16. (Currently Amended) A loudspeaker according to ~~any one of claims~~claim  
~~11 to 15~~, wherein the drive circuit is arranged to process the separate drive signals by a  
head-related transfer function.

17. (Currently Amended) A loudspeaker according to ~~any one of claims~~claim  
~~11 to 16~~, wherein the drive circuit includes an opposition mixer circuit arranged to derive  
an opposition signal from each of the separate drive signals by inversion of at least a  
high frequency component thereof and to mix each respective opposition signal with the  
other one of the separate drive signals from which the opposition signal was derived.

18. (Currently Amended) A loudspeaker according to ~~any one of the~~  
~~preceding claims~~claim 1, wherein the sound generating element comprises a sheet  
having a physical property which varies across the sheet between the two actuators.

19. (Original) A loudspeaker according to claim 18, wherein said physical  
property varies across the sheet with mirror symmetry about a central line between the  
two actuators.

20. (Currently Amended) A loudspeaker according to claim ~~18 or 19~~, wherein  
said physical property is stiffness.

21. (Original) A loudspeaker according to claim 20, wherein the stiffness of the sheet is lower along a central line between the two actuators than in portions on either side of the central line.

22. (Currently Amended) A loudspeaker according to claim 20 ~~or 21~~, wherein the sheet comprises a material having uniform composition across the sheet and the thickness varies across the sheet between the two actuators.

23. (Original) A loudspeaker according to claim 18, wherein said physical property is thickness.

24. (Original) A loudspeaker according to claim 23, wherein the sheet is transparent and disposed above a display device and the thickness varies across the sheet between the two actuators so that the sheet forms a lens.

25. (Currently Amended) A loudspeaker according to ~~any one of the preceding claims~~ claim 1, wherein the support is a portion of a housing of an electronic device.

26. (Original) A loudspeaker according to claim 25, wherein the sound generating element is transparent and covers a display device.

Claims 27 – 28. (Cancelled)

29. (Original) A loudspeaker comprising:

a sound generating element mounted on a support structure;

two actuators mounted in opposite halves of the sound generating element and operable to drive motion of the sound generating element relative to the support structure; and

a drive circuit for supplying a separate drive signal to each actuator, including an opposition mixer circuit arranged to derive an opposition signal from each of the separate drive signals by inversion of at least a high frequency component thereof and to mix each respective opposition signal with the other one of the separate drive signals from which the opposition signal was derived.

30. (Original) A loudspeaker comprising:

a sound generating element mounted on a support structure;

two actuators mounted in opposite halves of the sound generating element and operable to drive motion of the sound generating element relative to the support structure, the sound generating element comprising a sheet having a physical property which varies across the sheet between the two actuators.

31. (New) A loudspeaker according to claim 1, wherein the sound generating element is planar.

32. (New) A loudspeaker according to claim 10, wherein the drive circuit is arranged to supply the common drive signal to each actuator to drive rotation of the two actuators in opposite senses.